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10/597,670

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EXAMINER

BALLINGER, MICHAEL ROBERT

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,670	<b>Applicant(s)</b> KEIRSGIETER, PETRUS JACOBUS	
	<b>Examiner</b> MICHAEL R. BALLINGER	<b>Art Unit</b> 4116	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

In response to the amendment file August 3, 2006 claims 1-12 are pending.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the “cable” as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

The specification is objected to because it appears to be a direct translation of a foreign document not in idiomatic English. A substitute specification in proper idiomatic

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English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter. The examiner suggests replacing all occurrences of the word "pen" with "pin", specifically in the context of "drawing pen," because this phrase has a very specific meaning contrary to the subject matter disclosed in the specification.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "one or more treatment instruments and one or more lines for supply of water, air, and electricity" on lines 3 and 4. This limitation fails to particularly point out the claimed subject matter because it is unclear to the examiner how one line is capable of supplying water, air, and electricity. The examiner has interpreted this limitation to mean one or more lines for supply of water, air, or electricity.

Claims 2-12 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. On lines 18-20 of claim 2 it is unclear how the recited structural elements cooperatively engage to couple the first and second parts together.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign

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document and are replete with grammatical and idiomatic errors. On line 5 of claim 2 recites a "lead-through" as a structural element. Also, the recitation of "drawing pen" lines 7, 8, 12, and 17 of claim 2, line 2 of claim 3, lines 2 and 3 of claim 6, line 4 of claim 7, and line 2 of claim 11 is confusing. The Examiner suggests amending the claims to more distinctly claim the subject matter. For example, the examiner contends "drawing pin" would be more suitable terminology. The examiner also notes the use of "pens" in context with the guide elements. The examiner also suggests amending claims 4, 5, 6, 7, to replace "guide pens" with "guide pins" to more clearly point out the claimed subject matter of the invention.

Claims 10-12 are rejected for incorporating the above errors through dependency.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hatakeyama (U.S. Pat. No. 4,403,959) as evidenced by Disel (U.S. Pat. No. 5,476,379).

Regarding claim 1, figures 1 and 2 of Hatakeyama teach an apparatus for dental treatment including a treatment unit (i.e. handpiece body, 11) including a treatment instrument (i.e. head, 14, column 5, lines 12-13) and lines supplying air and water (air supply duct, 22 and water supply duct, 21, column 5, lines 25-28). In addition figure 2 of Hatakeyama teaches a connecting piece (i.e. hose portion, 12) positioned between the base and treatment unit. However, Hatakeyama does not specify a base for supplying the

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lines with air, water and electric. But as evidenced by figure 1 of Disel, a base connecting to the flexible hose (19) would be necessary to perform the function intend by Hatakeyama and is thus an inherent element of that invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-3 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama (U.S. Pat. No. 4,403,959) in view of Hahn et al. (U.S. Pat. No. 3,082,394).

Regarding claim 2, figures 2 and 3 of Hatakeyama teach a connecting piece including a first part (i.e. body, 11) and a second part (i.e. hose portion, 12), each part being provided with cooperating connector parts for the supply of water (i.e., water passage, 37) and air (i.e., air passage 38). Where when the first (11) and second (12) parts are coupled to each other, the connector parts are connected to each other so that a lead-through of water and

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air is from the base to the treatment unit. The second part (12) is provided with an opening (i.e. step portion, 60) through which a drawing pen (i.e. annular groove, 40) is movable, the drawing pen (40) at one outer end being fixed to a cable (connection pipe, 47) and at another outer end being provided with an inner flanged edge (i.e., inner flange, 54) spaced from an outer flanged edge (i.e. O-ring, 43). A spring (coil spring, 52) is provided in between said inner flanged edge (54) and said second part. The drawing pen (40) being supported on said second part (12) and being drawn against spring force through the opening by said cable (i.e., connecting pipe, 47). The first part (11) is provided with a first opening (fitting recess, 26) having a diameter allowing it to be mobile over the outer flanged edge (43). The first opening (26) extends into a second opening (recess, in which reference numeral 21 is shown) the second opening having a diameter smaller than a diameter of the outer flanged edge (43) but larger than a diameter of said drawing pen (40). When the first part (11) with said second opening (recess, in which reference numeral 21 is shown) is placed in between the flanged edges (43 and (54) and leans against the outer flanged edge (43) by pulling the cable (47) the first part is moved towards the second part, the connector parts being coupled to each other (as shown in figure 3). It is noted that Hatakeyama fails to explicitly disclose a leadthrough for electricity from the base to the treatment unit. However, Hahn et al. teaches an electrical lead through (i.e. loom, 14) for the supply of electricity between a first (male section, 15) and second (female section, 16) parts. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the connection of Hatakeyama to include the electrical connection as taught by Hahn et al. in

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order to provide greater versatility as to the types of treatment instruments that can be used.

Regarding claim 3, figure 2 of Hatakeyama teaches the second part (12) provided with a sleeve (support flange, 66) in which the drawing pen (40) is movable and the spring (52) is supported by the sleeve.

Regarding claim 8 and 9, it is noted that Hatakeyama fails to explicitly disclose the connector parts for the electrical current supply are provided on top of the parts and above the water supply. However, figure 1 and 2 of Hahn et al. teach the electrical connection (i.e. loom, 12) on top of the connection parts and above the water supply. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the connection mechanism of Hatakeyama to include an electrical connection on the top of the parts and above the water supply in order to prevent the a breakage in the fluid coupling from affecting the electrical setup.

Regarding claim 10, figure 2 of Hatakeyama teaches the openings (i.e. fitting recess, 26) are provided centrally in the parts.

Regarding claim 11, figure 2 of Hatakeyama teaches the inner flanged edge (54) and the outer flanged edge (43) of the drawing pen (40) have a space between them larger than a thickness of said first part (i.e. the thickness of annular groove, 63) such that said first part fits closely there between.

Regarding claim 12, figure 2 of Hatakeyama teaches the inner flanged edge (43) has a diameter larger than a diameter (i.e. diameter of recess, 26) the first opening in said first part.



Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama (U.S. Pat. No. 4,403,959) in view of Hahn et al. (U.S. Pat. No. 3,082,394) further in view of Arosio (U.S. Pat. No. 5,316,347).

Regarding claim 4, it is noted that Hatakeyama fails to teach the use of guide pens. However, Huhn et al. teaches providing the second part (16) with a guide pen (i.e. guide pin, 50) and providing the other part with a guide pen hole (i.e. guide pin receiving opening, 51) so when the guide pens are connected into a fixed position. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the connection of Hatakeyama to include a guide pen as taught by Arosio in order easily position the internal connecting structure. It is further noted that Hatakeyama as modified by Huhn et al. fails to disclose two pens and holes. However, figure 5 of Arosio teaches two guide pens (guiding pins, 23 and 24) and corresponding guide pen holes (i.e. guide openings, 25 and 26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add an additional guide pen and hole in order to prevent the connecting parts from rotating around the axis of a single guide pin prior to completing connection.

Regarding claim 5, it is noted that Hatakeyama and Huhn et al. fail to explicitly disclose the guide pens as conical. However, Arosio teaches conical guide pens (23 and 24). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the guide pen as taught by Hatakeyama in view of Huhn et al to be of conical shape in order to more easily integrate the guide pens with the guide pen holes.

Regarding claim 6, it is noted that Hatakeyama fails to explicitly disclose the use of guide pens. However, Huhn et al. teaches a guide pen (50) with a length such that its outer end extend beyond the inner flanged edge (i.e. retainer sleeve, 59) of said drawing pen (male member, 18) it pushed out by the spring (i.e. compression spring, 60). Therefore it would have been obvious to one having ordinary skill in the art to modify the connection as taught by Hatakeyama to include a guide pen having the appropriate length as taught by Huhn et al. in order to more accurately couple the parts together.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama (U.S. Pat. No. 4,403,959) in view of Hahn et al. (U.S. Pat. No. 3,082,394) in and Arosio (U.S. Pat. No. 5,316,347), as applied to claim 4, further in view of J.A. Grayson (U.S. Pat. No. 2,620,373).

Regarding claim 7 it is noted that the combination of Hatakeyama, Hahn et al. and Arosio fail to explicitly disclose a guide slot. However, Grayson teaches a guide slot (69). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made have modified the guide hole of the combination of Hatakeyama, Hahn et al. and Arosio to include a guide slot, as taught by Grayson, in order to more readily find the hole (column 5, lines 1-4).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Loland (U.S. Pat. No. 4,139,222) teaches a coupling device including two guide pins and a spring mounted member.

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Heil (U.S. Pat. No. 5,039,304) teaches a coupling device for a dental handpiece including a plurality of conduits and a quick attachment/detachment member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. BALLINGER whose telephone number is (571)270-5567. The examiner can normally be reached on Monday-Friday 7:30 A.M to 5:00 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe H. Cheng can be reached on (571)272-4433. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M.R.B./  
08/29/08

/Anu Ramana/  
Primary Examiner, Art Unit 3733